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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,613	07/31/2002	Hsu-Pm Kao	8860-US-PA	6858

31561 7590 09/09/2005

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE  
7 FLOOR-1, NO. 100  
ROOSEVELT ROAD, SECTION 2  
TAIPEI, 100  
TAIWAN

EXAMINER

LEWIS, DAVID LEE

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/064,613

**Applicant(s)**

KAO ET AL.

**Examiner**

David L. Lewis

**Art Unit**

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2,3,6-10,12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,3 and 10 is/are allowed.
- 6) ☒ Claim(s) 4,6,7,9 and 12 is/are rejected.
- 7) ☒ Claim(s) 8 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 4, 6, 7, 9, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishida et al. (2002/0135595).**

**As in claim 4, Ishida et al. teaches of a color adjustment method for a plasma display panel, figure 26 item 10,**

**comprising the steps of: receiving a gray scale input value that is within a first range, figure 26 item input (n bits);**

**converting the gray scale input value into a gray scale data that is greater than the gray scale input value, figure 26 item q bits,**

**moreover the gray scale data is within a second range, figure 26 item 3 and q bits, column 15 lines 12-23;**

and displaying the gray scale data as a brightness that is within a third range by using an error diffusion method, **figure 26 item 4**,

wherein the number of integers in the third range is less than the number of integers in the second range, **figure 26 item m bits, column 16 lines 49-67, column 17 lines 1-12**.

Wherein n bits have a first range, q bits have a second range, and m bits have a third range,  $q > m$ .

**As in claims 6 and 12, Ishida et al.** teaches of wherein the step of converting the grayscale input value into the gray scale data further comprises: looking up a value from a lookup table corresponds to the gray scale input value and adding the value obtained from the look up table to the error value to obtain the grey scale data, figure 26 items 3 and 30, wherein said multiplier as know in the art is implemented as a lookup table.

**As in claim 7, Ishida et al.** teaches of wherein a maximum integer of the third range is an integer portion of a quotient from a maximum integer of the second range divided by a predetermined value, figure 26 item  $(A-1) \times 2^{(n-m)/2n-1}$ .

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**As in claim 9, Ishida et al. teaches of a color adjustment method for a plasma display panel, figure 26 item 10,**

**comprising the steps of: receiving a gray scale input value that is an integer, figure 26 item input (n bits);**

**converting the gray scale input value into a corresponding gray scale data, figure 26 item q bits;**

**and adjusting a brightness display according to the gray scale data by an error diffusion method using an error value, figure 26 item 4;**

**wherein the gray scale input value has a one-to-one corresponding relationship to the gray scale data, figure 26 item m bits,**

**moreover if a range that gray scale data appears in comprises N integers and a brightness range to be adjusted comprises M integers, then  $N > M$ , figure 26 items n bits, q bits, m bits, column 16 lines 49-67, column 17 lines 1-12.**

**Wherein the N is represented by q bits, and M is represented by m bits.**

***Response to Arguments***

2. Applicant's arguments filed 6/21/2005, with respect to claims 4, 6, 7, 9, and 12 have been considered and are persuasive but are moot in view of the new ground(s) of rejection. See the above rejection over Ishida et al, figure 26, column 16 lines 49-67, column 17 lines 1-12. Claims 1, 5, 11 have been cancelled by the applicant. Claims 4, 6, 7, 9, and 12 have been rejected. Claims 8 and 13 have been objected to. Claims 2, 3, and 10 have been allowed.

***Allowable Subject Matter***

3. **Previously objected to claims 8 and 13 remain object** to wherein the specific limitations of said error diffusion circuit, figure 1 item 120, comprising said adding, multiplying, subtracting, and dividing of gray scale data is not found in the prior art of record in any combination including the other limitation of the claims.

4. **Claims 2, 3, and 10 are allowed** over the prior art of record, wherein specific limitations of said error diffusion circuit, figure 1 item 120, comprising said adding, multiplying, subtracting, and dividing of gray scale data is not found in the prior art of record in any combination including the other limitation of the claims.

**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David L. Lewis** whose telephone number is **(571) 272-7673**. The examiner can normally be reached on MT and THF from 8 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached on **(571) 272-7681**. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**


(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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September 5, 2005



**BIPIN SHALWALA**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600